

über die Reduction des Froschlarvenschwanzes und die Verlauf derselben auftretenden histolytischen Prozesse. Preisschriften gekrönt und herausgegeben von der fürstlich Jablonowski'schen Gesellschaft zu Leipzig. Leipzig: Verlag von B. S. Hirzel.

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23 (719)

Effect of phlorhizin on a dog with Eck fistula.

By N. B. FOSTER.

It has been stated by Rosenfeld that the administration of phlorhizin to dogs with Eck fistula does not induce glucosuria. This observation would have so much bearing upon our ideas of the mode of action of phlorhizin that the subject required confirmatory evidence.

One gram of phlorhizin in olive oil emulsion was given to a dog on which an Eck fistula had been done. Glucose was found in the urine in considerable quantity for nine days subsequent to the phlorhizin administration.

24 (720)

On elimination through the mucosa of the urinary bladder.

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In a previous communication (*Journal of Exper. Medicine*, XIV, 274, 1911), I stated that after intravenous injections of large amounts of dextrose the intestine contained on the average 1.2 per cent. of the injected amount of dextrose and in nephrectomized animals the dextrose content of the intestine reached the average of 2.2 per cent. The question arose then whether in the presence of a strong hyperglycemia, and especially after double nephrectomy, all mucous membranes are slightly permeable to this substance. The presence of measurable quantities of dextrose in the gastro-intestinal canal is no evidence for the permeability of the mucosa as such, since the mucous membrane of this organ is studded with numerous glandular structures which may readily

be instrumental in the removal from the blood of substances present there in excess. In the experiments I wish to communicate here, I selected, therefore, the bladder for the study of this problem since the mucous lining of this organ is practically the only membrane which possesses no glands. The rabbit was the experimental animal used.

After performing a double nephrectomy and tying a cannula in the bladder, seven to ten grams of dextrose per kilogram were injected intravenously in from twenty to fifty minutes, washing the bladder several times during and after the injection. The washings were then analyzed. The results are briefly as follows. In nine experiments either no sugar or else indeterminable amounts were found, and in four experiments only six to eleven milligrams, *i. e.*, 0.05 to 0.08 per cent. of the amount injected. In addition, in some of the experiments uranine, the sodium salt of fluorescein, was dissolved in the injection fluid. In the experiments in which twenty milligrams were introduced, no trace of uranine, a very diffusible dye, could be detected in the washings of the bladder. In four experiments 100 milligrams were introduced; in two there was not a trace and in the other two there was a barely perceptible trace.

The conclusion may therefore be drawn that the mucosa of the bladder is practically impermeable for diffusible substances present in the blood in great excess, even in the absence of the kidneys, the chief organs of elimination of the body.

25 (721)

Pancreatic transplantations in the spleen.

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The influence of pancreatic transplants in the spleen on the prevention of diabetes was studied. The spleen was selected because it has been shown that transplanted bits of tissue are especially well nourished in the pulp of this organ. In nine animals, bits of the pancreas of various size were buried in the